IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently amended): A crystalline layered compound ~~characterized in that the chemical composition of which is~~ represented by

$[(Si_{18-x} \cdot O_{38}) \cdot M_y \cdot (TMA)_z \cdot (H_2O)_w]$

[[(]]wherein

TMA is a tetraalkylammonium cation,

M is a cation of an alkali metal ~~such as,~~ selected from the group consisting of Na, K, ~~or~~ Li, and Rb,

x satisfies $0 \leq x \leq 1.2$,

y satisfies $0.5 \leq y \leq 1.5$,

z satisfies $6 \leq z \leq 8$, and

w satisfies $0.02 \leq w \leq 1.5$[[)]],

~~having as the~~ a basic structure thereof is a single-layer skeleton comprising:

one-dimensional micropores nanometers in size formed by a network of covalent bonds between Si and O atoms,

~~the~~ a lattice spacing d in the powder x-ray diffraction pattern ~~being~~ is ~~at least as~~ described in Table [[7]] 1 below: ~~(wherein d is the lattice spacing, w = weak relative strength, m = moderate relative strength, s = strong relative strength and vs = extremely strong relative strength).~~

Table 1

d(Å)	Relative strength
10.47±0.2	vs
8.38±0.15	w

7.34±0.15	m
7.00±0.1	m
6.51±0.1	m
6.45±0.1	s
5.86±0.05	m
5.82±0.04	m
5.66±0.04	w
5.23±0.04	m
5.07±0.04	w
4.90±0.04	s
4.75±0.04	m
4.57±0.04	w
4.40±0.04	m
4.35±0.04	s
4.26±0.04	s
4.19±0.04	vs
4.00±0.04	m
3.94±0.035	s
3.85±0.035	s
3.83±0.035	vs
3.78±0.035	w
3.67±0.035	m
3.63±0.035	s
3.60±0.035	w
3.55±0.035	m

3.51±0.035	m
3.50±0.035	vs
3.48±0.035	vs
3.38±0.035	m
3.34±0.035	w
3.32±0.035	s

wherein d is the lattice spacing, w = weak relative strength, m = moderate relative strength, s = strong relative strength and vs = extremely strong relative strength.

Claim 2 (Currently amended): The crystalline layered compound according to Claim 1, wherein in the layered compound ~~the~~ a local coordination of the O atoms surrounding the Si atoms in the Si-O network is tricoordinate and tetracoordinate.

Claim 3 (Currently amended): The crystalline layered compound according to Claim 1, ~~wherein in the layered compound~~ comprising:

alkali metal cations and

an organic structure directing agent ~~are included~~ in ~~the~~ gaps formed between layers of the crystal structure.

Claim 4 (Currently amended): The crystalline layered compound according to Claim 1, wherein ~~in the layered compound the~~ an effective gap formed between layers of the crystal structure is 3 Å or more.

Claim 5 (Currently amended): The crystalline layered compound according to Claim 1, wherein the layered compound ~~has~~ comprises pores formed of skeletal sites which are silicon 5-member rings or larger.

Claim 6 (Currently amended): A method for manufacturing [[a]] the crystalline layered compound according to claim 1, comprising heating a raw material composition of a crystalline layered compound in the presence of an organic structure directing agent, to synthesize a crystalline layered compound ~~with the chemical composition~~ represented by

$[(Si_{18-x} \cdot O_{38}) \cdot M_y \cdot (TMA)_z \cdot (H_2O)_w]$

[[(]]wherein

TMA is a tetraalkylammonium cation,

M is a cation of an alkali metal ~~such as~~ selected from the group consisting of Na, K [[or]] Li and Rb,

x satisfies $0 \leq x \leq 1.2$,

y satisfies $0.5 \leq y \leq 1.5$,

z satisfies $6 \leq z \leq 8$, and

w satisfies $0.02 \leq w \leq 1.5$[[)]].

Claim 7 (Canceled).

Claim 8 (Currently amended): The method for manufacturing a crystalline layered compound according to Claim 6 ~~or 7~~, wherein the organic structure directing agent is at least one selected from the group consisting of tetramethylammonium salts, tetraethyl ammonium salts, tetrapropylammonium salts, tetrabutylammonium salts, ~~and~~ other quaternary alkylammonium salts and amines.

Claim 9 (Withdrawn): A zeolite comprising the chemical composition represented by $[(Si_{36-x}T_y \cdot O_{72}) \cdot M_2]$ (wherein M is a cation of an alkali metal such as Li, Na, K or Rb, T represents Al, Ga, Fe and Ce as skeleton substituting elements, x satisfies $0 \leq x \leq 3.0$, y satisfies $0 \leq y \leq 1.0$, and z satisfies $0 \leq z \leq 3.0$), and having a micropore structure made up of covalent bonds between Si and O atoms.

Claim 10 (Withdrawn): The zeolite according to Claim 9, wherein the lattice spacing d (Å) in the powder x-ray diffraction pattern is as described in Table 2 or 3 below.

Table 2

d(Å)	Relative strength
9.17±0.05	100
6.86±0.05	35
6.11±0.05	5
5.50±0.05	4
4.84±0.05	1
4.70±0.05	1
4.58±0.05	3
4.44±0.05	7
4.35±0.05	7
4.09±0.05	6
3.88±0.05	8
3.81±0.05	9
3.68±0.05	3

3.43±0.05	25
3.41±0.05	29
3.31±0.05	8
3.24±0.05	9
3.07±0.05	1

Table 3

d(Å)	Relative strength
9.25±0.05	100
8.85±0.05	7
7.67±0.05	4
6.85±0.05	65
6.14±0.05	7
4.74±0.05	6
4.65±0.05	7
4.49±0.05	13
4.40±0.05	5
4.10±0.05	5
3.90±0.05	7
3.84±0.05	8
3.71±0.05	5
3.44±0.05	30
3.34±0.05	14
3.26±0.05	9
3.08±0.05	4

2.99±0.05	3
2.89±0.05	2
2.75±0.05	1
2.37±0.05	2
1.97±0.05	2
1.86±0.05	2

Claim 11 (Withdrawn): The zeolite according to Claim 9, wherein the crystal structures can be described as orthorhombic with crystal lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03Å (space group Pnma), orthorhombic with lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03 Å (space group Pnnm), orthorhombic with lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 14.74 ± 0.03Å (space group Pbcm) monoclinic with lattice constants in the range of a = 18.35 ± 0.05Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03Å, β = 90 ± 0.3° (space group P21/m).

Claim 12 (Withdrawn): The zeolite according to Claim 9, wherein the local coordination of the O atoms surrounding the Si atoms in the skeleton structure is tetracoordinate.

Claim 13 (Withdrawn): The zeolite according to Claim 9, wherein the skeletal structure formed by the binding of the Si and O atoms has a regular geometry.

Claim 14 (Withdrawn): The zeolite according to Claim 9, having pores with a mean size of 0.48 nm or more due to gas adsorption.

Claim 15 (Currently amended): A method for manufacturing a zeolite ~~characterized by~~ comprising performing dehydration polycondensation of the crystalline layered compound or crystalline layered compound containing skeletal substituted elements defined in Claim 1, to synthesize a zeolite ~~with the chemical composition~~ represented by the formula

~~$[(Si_{36-x}T_y \cdot O_{72}) \cdot M_z]$~~ $[(Si_{36-x} \cdot O_{72}) \cdot M_y]$

[[(]]wherein

M is a cation of an alkali metal ~~such as~~ selected from the group consisting of Li, Na, K ~~or~~ and Rb,

~~T represents Al, Ga, Fe and Ce as skeleton substituting elements,~~

x satisfies $0 \leq x \leq 3.0$,

y satisfies $0 \leq y \leq 1.0$ and

z satisfies $0 \leq z \leq 3.0$[[)]].

Claim 16 (Currently amended): The method for manufacturing a zeolite according to Claim 15, wherein ~~manufacture is in~~ dehydration polycondensation comprises a vacuum in the range of 1×10^{-3} to 1×10^{-8} torr ~~as a condition for dehydration polycondensation~~.

Claim 17 (Currently amended): The method for manufacturing a zeolite according to Claim 15, wherein ~~the heating~~ a temperature for the dehydration polycondensation is ~~400~~ 300 to 800°C.

Claim 18 (Currently amended): The method for manufacturing a zeolite according to Claim 15, wherein the ~~zeolite is manufactured at~~ the dehydration polycondensation is at atmospheric pressure ~~as a condition for dehydration polycondensation~~.

Claim 19 (Currently amended): The method for manufacturing a zeolite according to Claim 17 [[15]], wherein the heating temperature for dehydration polycondensation is ~~300~~ 400 to 800°C.

Claim 20 (Currently amended): The method for manufacturing a zeolite according to Claim 15, wherein [[the]] a rate of temperature rise in the dehydration polycondensation is 0.5 to 50°C per minute.

Claim 21 (Currently amended): The method for manufacturing a zeolite according to Claim 15, wherein dehydration polycondensation ~~is performed with~~ comprises a flow of combustion-supporting gas comprising molecular oxygen ~~molecules in a molecular state~~.

Claim 22 (Withdrawn): A catalyst or separation/adsorption material comprising the zeolite according to any of Claims 9 through 14.

Claim 23 (Withdrawn): A zeolite membrane characterized by comprising a zeolite (CDS-1) formed as a membrane on a support, said zeolite having the chemical composition represented by $[(Si_{36-x} \cdot O_{72}) \cdot M_y]$ (wherein M is a cation of an alkali metal such as Na, K or Li, x satisfies $0 \leq x \leq 3.0$, y satisfies $0 \leq y \leq 3.0$) and a micropore structure made up of covalent bonds between Si and O atoms, with a silicate structure of repeating units of Si-O tetrahedral coordination and geometrical crystal structures (atomic arrangement) comprising silicon 5-member and 8-member rings.

Claim 24 (Withdrawn): The zeolite membrane according to Claim 23, wherein said crystal structures are (1) orthorhombic with crystal lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03Å (space group Pnma), (2) orthorhombic with lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03 Å (space group Pnnm), (3) orthorhombic with lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 14.74 ± 0.03Å (space group Pbcm) and (4) monoclinic with lattice constants in the range of a = 18.35 ± 0.05 Å, b = 13.77 ± 0.03, c = 7.37 ± 0.03 Å, β = 90 ± 0.3° (P21/m).

Claim 25 (Withdrawn): The zeolite membrane according to Claim 23, wherein the lattice spacing d (Å) in the powder x-ray diffraction pattern is at least as described in Tables 4 and 5.

Table 4

d(Å)	Relative strength (peak)
9.17±0.05	100
6.86±0.05	35
6.11±0.05	5
5.50±0.05	4
4.84±0.05	1
4.70±0.05	1
4.58±0.05	3
4.44±0.05	7
4.35±0.05	7
4.09±0.05	6

3.88±0.05	8
3.81±0.05	9
3.68±0.05	3
3.43±0.05	16
3.41±0.05	18
3.31±0.05	8
3.24±0.05	9
3.07±0.05	1

Table 5

d(Å)	Relative strength (peak)
9.25±0.05	100
8.85±0.05	7
7.67±0.05	4
6.85±0.05	65
6.14±0.05	7
4.74±0.05	6
4.65±0.05	7
4.49±0.05	13
4.40±0.05	5
4.10±0.05	5
3.90±0.05	7
3.84±0.05	8
3.71±0.05	5
3.44±0.05	30

3.34±0.05	14
3.26±0.05	9
3.08±0.05	4
2.99±0.05	3
2.89±0.05	2
2.75±0.05	1
2.37±0.05	2
1.97±0.05	2
1.86±0.05	2

Claim 26 (Withdrawn): The zeolite membrane according to Claim 23, wherein the support is a porous base of an inorganic porous body, metal or metal oxide.

Claim 27 (Currently amended): A ~~zeolite membrane manufacturing~~ method to manufacture a zeolite membrane, ~~characterized by~~ comprising: ~~using as~~

coating a porous support with seed crystals; and

forming a crystalline layered silicate (~~hereunder abbreviated as~~ PLS), ~~the chemical composition of which is~~ represented by the formula

$[(Si_{18-x} \cdot O_{38}) \cdot M_y(TMA)_z \cdot (H_2O)_w]$

[[(]]wherein TMA is a tetraalkylammonium cation,

M is a cation of an alkali metal, selected from the group consisting of Li, Na, K and Rb,

x satisfies $0 \leq x \leq 1.2$,

y satisfies $0.5 \leq y \leq 1.5$,

z satisfies $6 \leq z \leq 8$;

w satisfies $0.02 \leq w \leq 1.5$[[),]] and

condensing ~~the~~ Si-OH groups in the PLS to ~~converting~~ convert the PLS to a CDS-1 having a geometrical crystal structure ~~(atomic arrangement) comprising silicon 5-member and 8-member rings,~~ and thereby forming a zeolite membrane on [[a]] the porous support,

wherein

the geometrical crystal structure of the CDS-1 comprises silicon 5-member and 8-member rings, and

~~having~~ comprises ~~as the basic structure thereof~~ a single-layer silicate skeleton comprising one-dimensional micropores nanometers in size formed by a network of covalent bonds between Si and O atoms. ~~, condensing the Si-OH groups in the PLS to converting the PLS to CDS-1 having a geometrical crystal structure (atomic arrangement) comprising silicon 5-member and 8-member rings, and thereby forming a zeolite membrane on a support.~~

Claim 28 (Currently amended): The ~~zeolite membrane manufacturing~~ method to manufacture a zeolite membrane according to Claim 27, wherein ~~a PLS membrane is formed using PLS~~ the seed crystals are PLS seed crystals.

Claim 29 (Currently amended): The ~~zeolite membrane manufacturing~~ method to manufacture a zeolite membrane according to Claim 27, wherein the porous support is a porous base of an inorganic porous body, metal or metal oxide.

Claim 30 (Currently amended): The ~~zeolite membrane manufacturing~~ method according to Claim 28, wherein the PLS membrane is heated to 300°C to 800°C to condense the Si-OH groups in the PLS and convert to CDS-1.

Claim 31 (Currently amended): The ~~zeolite membrane manufacturing~~ method according to Claim 30, wherein the PLS membrane is heated under reduced pressure.

Claim 32 (Currently amended): The ~~zeolite membrane manufacturing~~ method according to Claim 28, wherein the PLS membrane is formed by hydrothermal synthesis at a temperature of 140 to 170°C.

Claim 33 (Currently amended): The ~~CDS-1 zeolite membrane manufacturing~~ method according to Claim 27, wherein CDS-1 crystals synthesized from PLS are first applied to a support, and a membrane is then formed by secondary growth of the crystals.

Claim 34 (Withdrawn): A method for manufacturing ϵ-caprolactam from cyclohexanone oximeϵ-caprolactam, characterized in that a zeolite (CDS-1) having the chemical composition represented by $[(Si_{36-x}T_y \cdot O_{72}) \cdot M_z]$ (wherein M is a cation of an alkali metal such as Li, Na, K or Rb, T represents Al, Ga, Fe and Ce as skeleton substituting elements, x satisfies $0 \leq x \leq 3.0$, y satisfies $0 \leq y \leq 1.0$ and z satisfies $0 \leq z \leq 3.0$), and having a micropore structure made up of covalent bonds between Si and O atoms and a geometric crystal structure (atomic arrangement) comprising silicon 5-member and 8-member rings is used as a catalyst.

Claim 35 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein CDS-1 obtained by dehydration polycondensation at atmospheric pressure is used.

Claim 36 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein CDS-1 obtained by dehydration polycondensation at a heating temperature of 300 to 800°C is used.

Claim 37 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein CDS-1 obtained by dehydration polycondensation with a rate of temperature rise of 0.1 to 10°C/minute is used.

Claim 38 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein CDS-1 obtained by treating the crystalline layered silicate compound which is the precursor with a group 6 transitional metal oxide in the CDS-1 synthesis process is used.

Claim 39 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein the lattice spacing d (Å) in the powder x-ray diffraction pattern of the CDS-1 exhibits at least the diffraction peaks given in Table 6 below.

Table 6

d(Å)	Relative strength (peak)
9.17±0.05	100
6.86±0.05	35
6.11±0.05	5
5.50±0.05	4
4.58±0.05	3
4.44±0.05	7

4.35±0.05	7
4.09±0.05	6
3.88±0.05	8
3.81±0.05	9
3.68±0.05	3
3.43±0.05	16
3.41±0.05	18
3.31±0.05	8
3.24±0.05	9

Claim 40 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein the CDS-1 has micropores with a mean pore size of 0.483 nm or more based on physical adsorption and a volume of 0.6 cc/g or more.

Claim 41 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein the CDS-1 used in the Beckmann rearrangement reaction is cation exchanged or hydrogen ion exchanged.

Claim 42 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein the reaction temperature in the method for manufacturing ϵ-caprolactam from cyclohexanone oxime is 150 to 500°C.

Claim 43 (Withdrawn): The method for manufacturing ϵ-caprolactam according to Claim 34, wherein the WHSV of the cyclohexanone oxime is between 0.001 h-1 and 20.0 h-1.